

Claims:

1. A roll formed beam of substantially rectangular cross-section formed from a unitary piece of metal, the beam including:
 - opposed first and second substantially parallel walls formed with at least three
5 adjacent layers of said piece of metal; and
 - opposed third and fourth substantially parallel walls between the first and second walls, one of the third or fourth walls having a seam joining two opposed longitudinal edges of the piece of metal.
2. The beam as claimed in claim 1, wherein the opposed first and second walls
10 are formed with three adjacent layers of said piece of metal.
3. The beam as claimed in claim 2, wherein the three layers span the entire width of the first and second walls.
4. The beam as claimed in claim 2, wherein the three layers in the first and second walls are formed from two layers of metal spanning approximately half the width
15 of the first and second walls and one layer spanning all of the width of the first and second walls.
5. The beam as claimed in claim 4, wherein the two half width layers form the beam exterior.
6. The beam as claimed in claim 4, wherein the two half width layers form the
20 beam interior.
7. The beam as claimed in any one of the preceding claims, wherein the beam also includes at least two, adjacent layers of said piece of metal in the region of its four corners and directed away from the first and second walls.
8. The beam as claimed in claim 7, wherein the beam includes three said
25 adjacent layers of said piece of metal in the region of its four corners.
9. The beam as claimed in any one of the preceding claims, wherein the beam also includes a plurality of outwardly concave indentations in the third and fourth walls.
10. The beam as claimed in claim 9, wherein the beam includes three equi-spaced indentations in each of the third and fourth walls, wherein one of the indentations is
30 formed by the seam.
11. The beam as claimed in any one of the preceding claims, wherein the first and second walls are smaller than the third and fourth walls.
12. A method of roll forming a beam of substantially rectangular cross-section from a unitary substantially flat piece of metal, the method comprising the following
35 sequential steps:

forming a pair of spaced apart flattened sections of at least three layers of said metal in said metal piece;

folding the outer edges of the metal piece at approximately right angles to the flattened sections near the outermost end of the flattened sections;

5 folding the folded outer edges of the metal piece at approximately right angles to the flattened sections near the innermost end of the flattened sections; and

folding a joining seam between the adjacent outermost longitudinal edges of the metal piece.

13. The method as claimed in claim 12, wherein the flattened sections are formed
10 by: forming a pair of spaced apart channels in the metal piece, the channels each having a base and two sides; and flattening the channel bases against the remainder of the metal piece with the sides therebetween.

14. The method as claimed in claim 12, wherein the flattened sections are formed
15 by: forming a channel in the metal piece, the channel having a base and two sides; and flattening the channel sides against the channel base.

15. The method as claimed in claim 13 or 14, wherein the channel base(s) is/are flattened by drawing together the edges of the sides of each of the channel(s) remote the base(s).

16. The method as claimed in any one of claims 12 to 15, wherein the outer edges
20 of the metal piece are folded at approximately right angles to the flattened channel bases approximately 15% along the length of the flattened channel bases.

17. The method as claimed in claim 16, wherein the folded outer edges of the metal piece are preferably folded at approximately right angles to the flattened channel bases approximately 15% along the length of the flattened channel bases.

25 18. The method as claimed in any one of claims 12 to 15, wherein the outer edges of the metal piece are folded at approximately right angles to the flattened channel bases approximately 15% along the length of the flattened channel bases.

19. The method as claimed in claim 16, wherein the folded outer edges of the metal piece are preferably folded at approximately right angles to the flattened channel
30 bases approximately 15% along the length of the flattened channel bases.

20. The method as claimed in any one of claims 12 to 19, wherein the method also includes forming a plurality of indentations into the metal piece before the folding the outer edges of the metal piece relative to the flattened channel bases.

21. The method as claimed in claim 20, wherein the method preferably also
35 includes forming five said indentations.

22. The method as claimed in claim 20 or 21, wherein three indentations are folded between the flattened channel bases and one indentation is folded into the metal piece outwardly of each flattened channel base.

23. A roll formed beam substantially as described herein with reference to any
s one of the embodiments shown in the accompanying drawings.

24. A method of roll forming a beam, the method substantially as described herein with reference to any one of the embodiments shown in the accompanying drawings.